California Energy Commission (CEC)

In the Matter of:	)	
	)	
The Preparation of the	)	
2005 Integrated Energy	)	Docket 04-IEP-1F
Policy Report	)	
	)	

Comments of the Los Angeles Department of Water and Power
on the CEC Staff Report, Upgrading California's Electric Transmission System
(CEC 700-2005-018) and Other Discussion at the Committee Hearing on
Strategic Transmission Planning Issues Held on July 28, 2005

The Los Angeles Department of Water and Power (LADWP) welcomes this opportunity to provide comments on the CEC Staff Report and the 2005 Energy Committee Hearing on Strategic Transmission Planning Issues[1]. Given the short deadline for responding,[2] only certain issues can be discussed.

The LADWP is a municipally-owned, vertically-integrated utility operating its own control area which also serves the municipal utilities of Burbank and Glendale. On July 22, 2005, we experienced a historically high system peak of 5708 MW. LADWP was able to serve this extreme demand, notwithstanding the loss of a unit at the Intermountain Power Facility, our single largest resource. The California Independent System Operator (CAISO) was also undergoing stage two alerts during the same time frame as LADWP was experiencing historically high peak demand. LADWP recognizes that transmission adequacy is important to all control areas in California.

The designation of new transmission corridors within California is an exceedingly valuable undertaking. The LADWP looks forward to participating in the designation of such utility corridors. We strongly urge that the following considerations are entertained by the CEC in implementing an effective and lasting utility corridor: (1) sufficient width to accommodate future load growth and access to alternative energy resources; (2) efficient use protection of existing rights-of-way from encroachment and for security; and (3) maintenance of the utility corridor, including vegetation management and repair necessitated by natural disasters such as fire, storm damage, and earthquake.

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[1] The 2005 Energy Committee Hearing on Strategic Transmission Planning Issues and Transmission Report was held on July 28, 2005.

[2] Reply Comments are requested to be submitted by August 4, 2005.

For LADWP, generation, transmission, and distribution planning efforts must be coordinated while providing reliable power at economic rates. Additionally incorporated into our planning efforts is our City Council approved, aggressive goal of supplying 13 percent of load from renewable resources by the year 2010 and 20 percent of the load by 2017.[3] As referenced in the CEC Staff Report, LADWP maintains a conservative criterion to meet a 1-in-10 year high temperature event.[4] LADWP's criterion is consistent with historic and prevailing standards and . A lesser standard may be easier to attain, but this criterion has served LADWP well.

The CEC Staff Report sets forth recommended criteria as "[t]he first step in integrating transmission, generation and demand-side alternatives in resource planning . . .[in order to] properly reflect the long-term priorities of the California energy market participants."[5] The six criteria include: least cost, reliability, risk, market efficiency, fuel diversity, and resource flexibility. These criteria should be applied by the California Independent System Operator (CAISO) in approaching the transmission needs of the CAISO operated grid. Many of the problems associated with inadequate transmission assets in California stem from the unique problems created by the assignment of operational control of transmission owned by the independently owned utilities (IOUs) to the CAISO as a result of deregulation in California. The use of LMP by the CAISO creates its own set of problems because it is distinctly different from the prevailing physical model for transmission access utilized by the rest of the western interconnection. At least in the west, the use of a locational marginal pricing (LMP) model has increased cost, reduced reliability, and has not provided price signals to increase investment in transmission

Furthermore, the CAISO LMP model serves approximately 30% of the total load in the western interconnection. The LMP model in the "middle" of the physical rights transmission model used by the balance of the western interconnection creates an island that has proven difficult when integrating its transmission resources with the balance of the western interconnection. One model should be utilized (the physical rights model), or the CAISO needs to be more flexible in integrating with the physical rights model utilized by the balance of the western interconnection in order to achieve full integration of transmission in the WECC.

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[3] LADWP is currently planning to integrate a 120 MW, renewable-energy Pine Tree Wind Farm into our system. Such integration includes both the generation and transmission components.

[4] The difference in forecasted peak demand between a 1-in-2 year and a 1-in-10 year event for LADWP is approximately 200 MW.

[5] CEC Staff Report , page 128 and following pages.

LADWP has been an active participant in the Public Power Initiative of the West's (PPIW) development of its Policies for the Successful Implementation of Transmission Plans within the Western Interconnection. This document (Attachment 1) clearly:

1. Articulates the need for contractual agreements (as opposed to tariff language) for joint projects;
2. Promotes open, transparent processes available to all interested parties which will reduce the opportunities for market manipulation;
3. Calls for an Open Season for project participation by which proponents of a transmission plan or plans will provide opportunities for all interested parties to submit proposals to site, design, construct and, where appropriate, provide financial participation in transmission projects;
4. Supports existing and emerging, regional and sub-regional planning efforts consistent with these policies; and
5. Encourages third party participation and financing of transmission where appropriate.

LADWP has a long history of joint transmission projects with present CAISO participating transmission owners (PTOs) and would like to continue such joint projects when our future transmission needs coincide with those of PTOs. However, LADWP participation in future joint projects operated by the CAISO, will be predicated upon the following considerations:

- Deliverability – with the line in service, power up to LADWP's full entitlement must be capable of being scheduled and delivered,
- Incurrence of no LMP related charges to LADWP,
- Losses to be determined in the project agreement, not subject to LMP pricing principles, and
- Durability of the project agreement for the life of the project.

The operational paradigm of the CAISO system does not lend itself to CAISO's participation in wesTTrans.net.[6], However, the CAISO could use available transmission from this OASIS as may be needed by the CAISO participants. For LADWP, our participation in wesTTrans has witnessed a significant increase in OASIS transactions: in the first 10.5 months of its operation, 527 transactions occurred while in 50 months on our previous OASIS site only 171 occurred.

The LADWP/Southern California Edison (SCE) Interconnection

Associated with these proceedings is a presentation by a consultant for the Energy Commission concerning the LADWP/SCE interconnection. This presentation appears to be a compendium of information and analyses

[6] This west-wide common OASIS is the marketplace for available transmission capacity for almost all non-CAISO transmission providers in the western interconnection and of which LADWP is a founding participant.

performed by others and fails to recognize the benefits that both LADWP and SCE receive from our mutual interconnection.

The LADWP has a long history of cooperative and coordinated planning with other utilities in the west, especially with SCE. In part, each of the two systems was designed to complement the other. To further appreciate the synergies between these two systems, below is a brief history of the interconnections between them.

Prior to conversion from a 50Hz to a 60 Hz system by Los Angeles, coincident with delivery of power to Los Angeles from the Boulder Canyon Project (Hoover Dam), the two systems, each operating at 50 Hz were closely interconnected. However, SCE was slower to convert to a pure 60 Hz system and as result Los Angeles' post-Hoover system was operated independently of SCE's. In the aftermath of SCE's conversion to a pure 60 Hz system in the late 40s and both systems' rapid growth in the 50s and afterwards, synergies in the two systems were again recognized and interconnections were again established. Some highlights of Los Angeles' post-war relationship with SCE follows:

- By June 1948, an interconnection to SCE's Laguna Bell station was established. In subsequent years, as the two systems' load patterns shifted and new generation resources were added this tie disrupted desired flows and was opened, replaced by newer interties as described below. This tie is now used for emergency purposes only, the angular difference between the two systems being such that significant power flow from SCE to LADWP would otherwise occur.
- By 1954 Los Angeles' Owens Gorge system was tied to the California Electric Power System, subsequently absorbed by SCE (by 1965).
- In November 1968 the two systems were tied together at Sylmar, in anticipation of the Pacific DC Intertie (PDCI) going into service. The PDCI south of the Nevada-Oregon border is operated by Los Angeles and is 50 percent owned by SCE and 40 percent owned by Los Angeles. (The remaining 10 percent is owned by the cities of Burbank, Glendale and Pasadena.)
- In May 1970 the PDCI went in service with a rating of 1440 MW at ±400 kV.
- By May 1971 Los Angeles' system was interconnected to the SCE System at the SCE-operated Eldorado station and LADWP began receiving power from Mohave Generating Station, jointly owned by SCE, LADWP, Nevada Power Company and the Salt River Project (originally 56, 20, 14 and 10 percents respectively); Los Angeles is 20 percent owner of the 500-kV Mohave-Eldorado transmission line.
- In October 1973 the 500-kV Victorville-Lugo tie between the two systems goes into service increasing the reliability of both systems.
- In November 1976 a 230/115-kV interconnection with SCE at Inyo was established.

- In January 1985, the PDCI was expanded to a 2000 MW, ±500-kV system with the original ownership percentages as above.
- In April 1989, The PDCI was further expanded with the addition of parallel converters to a 3100 MW, ±500-kV system with, again, the same ownership percentages.
- Put in service in December 2004, at LADWP's sole expense, a third bus-tie transformer at the Sylmar station increases the LADWP/SCE interchange capacity there to 1600 MW.[7]
- Also completed in December 2004 was the Sylmar Replacement Project which replaced the converter station's original mercury-arc valve equipment with thyristor technology and otherwise upgraded the facility to that of state-of-the-art. As a result of the Replacement Project, significant economic benefit will accrue due, in part, to greater availability, decreased maintenance, lower converter losses and decreased operational expenses.

The recommendations of the consultants fail to apply the criteria articulated for qualifying transmission found in the CEC Staff Report. Of note is the SCE's analysis of the Palo Verde Devers Line 2 (DPV2). DPV2 is lauded for increasing revenue to SCE from ETCs and increasing revenue to the CAISO by wheeling through or out of the CAISO grid.[8] Focusing on this aspect of transmission planning is in direct contravention of the criteria for evaluating transmission, and needs to be confronted and resolved in order to achieve the goals of the CEC which are least cost, reliability, risk, market efficiency, fuel diversity, and resource flexibility. Increasing revenue for both SCE and CAISO at the expense of ETCs and wheel throughs does not necessarily achieve the objectives of least cost, market efficiencies, and resource flexibility.[9] In order for the future of the western interconnection grid to function with maximum efficiency, the needs of all participants, including non-IOUs and non-IOU transmission assets must be evaluated and the criteria fairly and justly applied.

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[7] The Navigant Consulting Report, page 21, comments that the "reason for the bank outage was not identified." Such uninformed remarks ignore the fact that LADWP as a good neighbor added a buss at Sylmar. The mechanism to add at third buss required a three week outage.

[8] CERTS, Electric Power Group, Power Point Presentation, p. 5 (07/28/05).

[9] The CERTS, Electric Power Group, Power Point Presentation, p. 5, analysis speaks of economic benefits associated with DPV2 as cost savings. Yet, costs will increase for ETCs and use of the CAISO grid. Cost savings for one group at the expense of another should not be the goal of an overarching transmission plan. Supporting such an approach can only lead to distrust and potential lack of cooperation.

Conclusions

LADWP will continue to work cooperatively with the CEC. However, it's a long-established understanding that transmission is interstate in nature, and the impact on other control areas should be carefully and fully assessed. In recognition of this fact and in order to be optimally effective, coordinated transmission planning must be done on the appropriate scale, which is independent of state borders.

Dated: August 5, 2005

Respectfully submitted,

Randy S. Howard
Executive Assistant to the
Chief Operating Officer-Power System

Public Power Initiative Of The West

Policies For The Successful Implementation Of Transmission Plans Within The Western Interconnection

Goal

This paper is presented by Public Power Initiative of the West[1] (PPIW) to promote policies which will implement new transmission projects that meet the needs of all market participants. PPIW views these proposals as a means by which all stakeholders may carry out joint/coordinated transmission planning and enter into contractually-based expansion projects compatible with the development of generation.

Current Status

In much of the Western Interconnection, many load-serving entities have struggled with the effects of deregulation and restructuring efforts on their ability to meet their obligation to serve. These efforts have blurred ownership rights, contractual rights, and the assignment of the cost responsibility for new and even existing transmission facilities. While portions of the Southwest have been able to provide intra-regional transmission additions and upgrades, other regions within the Western Interconnection have fallen behind with such improvements.

For many years, the traditional utility physical rights model was applied to transmission planning, construction and operational activities at local, state and federal levels, providing an acceptable degree of operating and financial certainty. Now, we are looking at a mix of environments relating to transmission, some of which emphasize a new model which defines transmission service in terms of financial rights, while others have retained the traditional and proven physical model that yielded clear and durable rights and predictable costs. In parts of the West, this duality has created uncertain reliability and unpredictable cost factors as well as a significant shrinkage in utility investors' confidence. The unfortunate result of these new dynamics is a failure to build transmission additions identified as needed.

[1] Public Power Initiative of the West (PPIW) is a voluntary group of utilities, most of them vertically integrated, located throughout the Western Interconnection.

Public Power Initiative Of The West

Needed Changes

Uncertainties involving transmission rights and costs face many stakeholders in the Western Interconnection. Change is essential and PPIW proposes the following policies as guidelines by which these uncertainties will be overcome. Their implementation will support a process for approval of transmission projects by ***all*** project stakeholders and, where applicable, their jurisdictional authorities. The end result will be establishment of a process which will facilitate coordination of project siting decisions and regional analyses of environmental impacts.

Efficient, equitable and reliable use of existing and future bulk transmission facilities and open access to wholesale generation markets, including renewables, will be facilitated. These are objectives supported by the Western Governors Association and the Federal Energy Regulatory Commission (FERC).

PPIW Proposal:

In Order to:

- ***Promote** voluntary* (versus mandated) ***collaborative planning and construction of new transmission;***
- ***Enable** Prudent Planning* for all transmission users for long and short term resource adequacy and price predictability;
- ***Clarify** the benefits of transmission ownership rights* as distinguished from transmission access rights;
- ***Facilitate** major interstate transmission projects* that benefit control areas and other entities by providing a vehicle for participation in the planning process;
- ***Promote** cost sharing of transmission projects* to realize economies of scale and produce an effective transmission plan or integration of plans to accommodate a variety of energy solutions, including renewable resources;
- ***Minimize** the environmental impact* of growing electricity needs;
- ***Expedite** Transmission Construction* to reduce or avoid transmission congestion.

Public Power Initiative Of The West

To Achieve These Objectives, PPIW Urges All Western Interconnection Stakeholders To Endorse The Following Policies:

- Using voluntary contracts as the preferred vehicle, initiate an interactive process that accommodates the co-existence of physical and financial based transmission rights models;

- Promote inter-regional multi-system transmission planning coordination to address reliability and operational consistency;

- Use open, transparent processes for all interested parties;

- Use an Open Season concept[2] as an opportunity for enhanced project participation;

- Utilize contract based (vs. tariff-based) participation to assure:

    - Financial (commercial) viability
    - Price certainty
    - Operational certainty
    - Reliability
    - Cost allocation;

- Recognize and support of existing and emerging, regional and sub-regional planning efforts consistent with these policies;

- Encourage expedited, uniform interregional siting processes, as endorsed by the Western Governors' Association;

- Encourage third party participation and financing where appropriate;

- Recognize the different national concerns of the United States, Canada and Mexico within the Western Interconnection.

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[2] As used here, the term "open season" refers to a process by which proponents of a transmission plan or plans will provide opportunities for all interested parties (utilities, ITPs, IPPs, etc.) to submit proposals to site, design, construct and, where appropriate, provide financial participation in transmission projects.

Public Power Initiative Of The West

These Policies Would Be Implemented By:

- Sub-regional planning groups such as the Southwest Transmission Expansion Plan (STEP) process and regional groups such as the Southwest Area Transmission study group (SWAT), committees of the Northwest Power Pool and new groups in other areas;

- A contractually supported process among potential transmission project participants across the Western Interconnection to assess needed transmission sub-regionally and regionally;

- A contractually supported Alternate Dispute Resolution (ADR) process vested with necessary enforcement authority, utilizing an existing body or establishing uniformly applied ADR protocols, with a panel of arbitrators selected from a pre-approved list, to resolve participants' disputes.

What's Needed to Succeed

Through implementation of the policies set forth here, every stakeholder in the Western Interconnection will have its transmission needs equitably addressed. This would encourage:

- FERC's acceptance of contractual agreements between or among RTOs, ISOs and other entities in lieu of tariff-based relationships.

- The support of organizations such as the Western Governors' Association, as well as regional and sub-regional planning organizations.

- The participation of independent power producers and other market participants who bring affordable and renewable energy resources to the Western Interconnection.